March 11, 2019

NW-2019-068

John Jones
Department of Energy
4100 Guardian Street
Suite 160
Simi Valley, CA 93063

Subject: DE-EM0000837-DT0007583 Transmittal of Deliverable for Q1, 2019 Groundwater Level Monitoring Data

Dear Mr. Jones:

This letter is provided as the quarterly water level letter deliverable outlined in Section C.2.2. (7) of contract DE-EM0000837. During the 1st quarter of 2019 the following tasks were accomplished; groundwater levels were collected from 62 wells and CDM Smith continued work at the FSDF.

Groundwater Level Measurements

On 8, 9 and 10 January 2019, North Wind, Inc. collected groundwater level monitoring data from 62 wells located in Area IV and the Northern Buffer Zone as part of the Santa Susana Field Laboratory Site-wide Groundwater Monitoring program. Attached are the groundwater level measurements collected. The data will be forwarded to Boeing, NASA, and CDM Smith. The data will be submitted to the Department of Toxic Substances Control as part of the Boeing Q1, 2019 Groundwater Monitoring Report and as part of the 2019 DOE Annual Groundwater Report.

Work Completed by CDM Smith

Monitoring of water levels of coreholes and RS-54 continued at the Former Sodium Disposal Facility. Frequency of water levels increased to monitor for effects of infiltration of recent winter rains. Pumping and sampling of Corehole 21 occurred on January 24 and February 4, 2019 as part of the FSDF Groundwater Interim Measure.

If you have any questions or need additional information please contact me at (208) 528-8718.

Sincerely,

Bradley J. Frazee
ETEC Program Manager

Enclosure

cc:
File
John Blecher
Stewart Williford
Trina Cesnik

TABLE 3
WATER LEVEL DATA, FIRST QUARTER 2019
SANTA SUSANA FIELD LABORATORY AREA IV
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Depth to Water (feet BTOC)	Reference Point Elevation (feet above MSL)	Static Water Level Elevation (feet above MSL)	Notes
PZ-097	Shallow	1/10/2018	Dry	1761.87	---	
PZ-108	Shallow	1/9/2019	Dry	1809.36	---	
PZ-124	Shallow	1/10/2019	Dry	1764.11	---	
RD-07	Chatsworth	1/10/2019	102.52	1812.82	1710.30	
RD-14	Chatsworth	1/9/2019	111.87	1824.18	1712.31	
RD-17	Chatsworth	1/9/2019	48.90	1836.30	1787.40	
RD-19	Chatsworth	1/9/2019	95.94	1853.16	1757.22	
RD-20	Chatsworth	1/9/2019	54.24	1819.52	1765.28	
RD-21	Chatsworth	1/9/2019	109.00	1866.96	1757.96	
RD-22	Chatsworth	1/10/2019	298.84	1853.41	1554.57	1
RD-23	Chatsworth	1/10/2019	240.53	1838.19	1597.66	1
RD-24	Chatsworth	1/9/2019	49.58	1809.93	1760.35	
RD-27	Chatsworth	1/9/2019	67.51	1841.67	1774.16	
RD-29	Chatsworth	1/9/2019	27.30	1806.29	1778.99	
RD-30	Chatsworth	1/10/2019	29.13	1768.69	1739.56	
RD-33A	Chatsworth	1/10/2019	211.23	1792.97	1581.74	1
RD-33B	Chatsworth	1/10/2019	280.82	1793.72	1512.90	
RD-33C	Chatsworth	1/10/2019	282.96	1793.61	1510.65	
RD-34A	Chatsworth	1/10/2019	51.70	1761.91	1710.21	
RD-34B	Chatsworth	1/10/2019	69.30	1762.51	1693.21	
RD-34C	Chatsworth	1/10/2019	27.77	1762.79	1735.02	
RD-54A	Chatsworth	1/10/2019	181.33	1841.72	1660.39	
RD-54B	Chatsworth	1/10/2019	243.81	1842.54	1598.73	
RD-54C	Chatsworth	1/10/2019	232.29	1843.77	1611.48	
RD-57	Chatsworth	1/8/2019	NA	1774.15	---	2
RD-59A	Chatsworth	1/8/2019	26.74	1340.59	1313.85	
RD-59B	Chatsworth Artesian	1/8/2019	19.25 psi	1342.49	---	3
RD-59C	Chatsworth Artesian	1/17/2017	19.25 psi	1345.41	---	3
RD-63	Chatsworth	1/10/2019	44.67	1764.83	1720.16	
RD-64	Chatsworth	1/10/2019	251.36	1857.04	1605.68	1
RD-65	Chatsworth	1/10/2019	221.40	1819.14	1597.74	
RD-74	Chatsworth	1/10/2019	Dry	1810.90	---	4
RD-87	Chatsworth	1/9/2019	57.32	1789.09	1731.77	
RD-88	Chatsworth	1/9/2019	Dry	1774.62	---	
RD-90	Chatsworth	1/9/2019	49.05	1784.75	1735.70	
RD-91	Chatsworth	1/9/2019	103.67	1818.04	1714.37	
RD-93	Chatsworth	1/9/2019	45.43	1810.48	1765.05	
RD-94	Chatsworth	1/9/2019	31.90	1744.38	1712.48	
RD-95	Chatsworth	1/9/2019	66.47	1811.36	1744.89	
RD-96	Chatsworth	1/10/2019	76.81	1805.49	1728.68	
RD-97	Chatsworth	1/10/2019	71.76	1792.22	1720.46	
Well Identifier	**Geological Unit**	**Date of Measurement**	**Depth to Water (feet BTOC)**	**Reference Point Elevation (feet above MSL)**	**Static Water Level Elevation (feet above MSL)**	**Notes**

TABLE 3
WATER LEVEL DATA, FIRST QUARTER 2019
SANTA SUSANA FIELD LABORATORY AREA IV
VENTURA COUNTY, CALIFORNIA

RD-98	Chatsworth	1/10/2019	60.14	1808.73	1748.59	
RS-16	Shallow	1/10/2019	Dry	1811.05	---	
RS-18	Shallow	1/9/2019	5.60	1802.86	1797.26	
RS-25	Shallow	1/9/2019	Dry	1862.71	---	
RS-27	Shallow	1/9/2019	Dry	1804.78	---	
RS-28	Shallow	1/10/2019	Dry	1768.59	---	
RS-54	Shallow	1/9/2019	43.65	1846.66	1803.01	
DS-43	Shallow	1/9/2019	20.80	1809.52	1788.72	
DS-44	Shallow	1/9/2019	75.73	1851.21	1775.48	
DS-45	Shallow	1/9/2019	Dry	1866.58	---	
DS-46	Shallow	1/9/2019	43.18	1797.79	1754.61	
DS-47	Shallow	1/9/2019	113.00	1867.94	1754.94	
DD-139	Chatsworth	1/10/2019	182.45	1793.01	1610.56	
DD-140	Chatsworth	1/9/2019	159.81	1798.16	1638.35	
DD-141	Chatsworth	1/10/2019	79.68	1762.79	1683.11	
DD-142	Chatsworth	1/9/2019	64.99	1812.22	1747.23	
DD-143	Chatsworth	1/10/2019	50.01	1789.74	1739.73	
DD-144	Chatsworth	1/9/2019	27.93	1810.69	1782.76	
DD-145	Chatsworth	1/9/2019	31.11	1798.90	1767.79	
DD-147	Chatsworth	1/9/2019	54.03	1814.18	1760.15	
C-8	Chatsworth	1/9/2019	202.01	1842.23	1640.22	

BTOC = below top of casing
MSL = Mean Sea Level
(1) = FLUTe removed, open borehole.
(2) = FLUTe partially removed, lid wielded shut.
(3) = Pressure transducers installed on artesian well.
(4) = Obstruction at 95.1 ft.
--- = No data available or not aplicable

Chatsworth = Chatsworth Formation groundwater unit.
Chatsworth Artesian = Chatsworth Formation groundwater unit - Artesian with hydrostatic head above land surface.
Shallow = Near Surface groundwater unit.
Static water level elevations were calculated using the following equation:
E*w* = E - D + C
Where:
E*w* = Elevation of water above mean sea level (feet)
E = Elevation above mean sea level at point of measurement (feet).
D = Depth to water (feet)
C = Calibration correction factor (feet)